

**POLYESTER YARN SUITABLE FOR FALSE-TWISTING PROCESSING
AND METHOD FOR PRODUCING THE SAME**

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Abstract

PROBLEM TO BE SOLVED: To obtain a polyester yarn which has suitable crystallinity, suitable orientability and a soft touch and is useful for stretchable raw materials, etc., by forming the yarn from specific polytrimethylene terephthalate under specific conditions.

SOLUTION: This polyester yarn satisfying a density of 1.320 to 1.340, a birefringence of 0.030 to 0.070, a thermal stress peak of 0.01 to 0.12 g/d, a boiling water shrinkage degree of 3 to 20%, and a breaking elongation of 40 to 140% comprises polytrimethylene terephthalate whose 90 mol.% or more comprises trimethylene terephthalate repeating units. The polyester yarn is produced by melt-extruding the polytrimethylene terephthalate from a spinneret, quenching the extruded melted multi-filaments, thermally treating the solidified multi-filaments at 50 to 170 deg.C and then winding up the treated multi-filaments in a winding tension of 0.02 to 0.20 g/d. The yarn is preferably false-twisted at a false-twisting rate of 300 to 1,000 m/min and at a false-twisting temperature of 100 to 200 deg.C.

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